



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,820	08/25/2008	Detlev Wittmer	GHER3001/FJD	6523
23364 7590 10/26/2010 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER RAHMAN, MOHAMMAD L				
ART UNIT 2438		PAPER NUMBER		
MAIL DATE 10/26/2010		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/585,820

Applicant(s)

WITTMER ET AL.

Examiner

MOHAMMAD L. RAHMAN

Art Unit

2438

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 07/12/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-3 are filed 08/25/2008 presented for examination. Claims 1-3 are pending.

Preliminary Amendment

Preliminary amendment to the specification, filed 08/25/2008 has been acknowledged.

Priority

The certified copy has been filed in parent Application No. DE 10 2004 001 755.7, filed on 08/25/2008. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119 (e) or 120, a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Information Disclosure Statement

The information disclosure statement filed 07/12/2006 has been placed in the application file and the information referred to therein has been considered as to the merits.

Oath or Declaration

The Oath filed on 08/25/2008 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The drawings filed on 08/25/2008 have been accepted.

Specification

1. The disclosure is objected to because: Specification discloses, see page 3: lines 15-25, "Fig.1 shows.....databus D1 is connected with a field bus segment SM1." Further page 4, lines 11-15 discloses, "the connection is accomplished via a bus connection BA, the database D1, the gateway G1, the field bus FB to the field device F1". It is unclear D1 is whether databus or database. For examination purpose, D1 is considered as databus.

Appropriate correction is required.

2. Specification discloses, see page 4: lines 1-3, "Running in the FDT frame application are: A device DTM, DTM-F1; an encryption DTM, V; and a communications DTM, Comm DTM". Nowhere in the specification has been disclosed the purpose and functionalities of a communications DTM, Comm DTM. Clarification required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims recite FDM/DTM standard but no where in the specification FDM/DTM has been described. Specification disclosed, see page 3: lines 1-5, "The FDT specifications, in terms of an industrial standard, were developed by PNO (Profibus.RTM. User Organisation) in cooperation with ZVEI (Zentralverband Elektrotechnik-und Elektronikindustrie--i.e., the German Electrical and Electronic Manufacturers' Association). The current FDT specification 1.2 is available from ZVEI ". But FDT specification 1.2 is not found in ZVEI site.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3 rejected under 35 U.S.C. 101 because

Independent claim 1 recites "a method" and the method step recites encrypting data but does not recite any machine tied to the method. Pending claims are interpreted as broadly as their terms reasonably allow and encryption can be done without (simple) or with machine (complex). The method fail both prong of the new Federal Circuit decision since they are not tied to and can be performed without the use of a particular apparatus, as well as not transforming any article into a different state or thing. Dependent claims 2-3 depends from claim 1 do not cure the

deficiencies. Thus claims 1-3 are non-statutory and therefore rejected. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Brownlie et al. US 7,174,563 hereinafter "Brownlie".

Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Regarding claim 1, Brownlie taught a method for encryption of data in a process automation network, including a network connected control unit (*see [1:16-20, 1:26-30] [fig. 1] computer network security systems and more particularly to computer network security systems and methods having enforceable policy provisions. Computer network security systems are known which allow network nodes to have several software applications that use the same security enforcement rules by having a cryptographic application which is accessible by each of the applications.*), comprising the step of:

encrypting data in the network-connected control-unit, in a separate, exchangeable software module (e.g. [4:17-51] *The system 10 also includes a plurality of network nodes 22 that have*

access to the public directory 20 through a network link 24. Each network node preferably includes a cryptography engine, such as an RSA based public key cryptography engine to decode encrypted data and send encrypted data to other nodes in the network as known in the art. The cryptography engine facilitates cryptographic processing of data that is accessible by a plurality of software applications supported by the node 22. Cryptography engine is implemented as separate software module).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownlie in view of "PROFIBUS Technology and Application System Description, Version October 2002" hereinafter "PROFIBUS".

Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Regarding claim 2, Brownlie taught the method as claimed in claim 1, Brownlie was silent on, wherein: the software module meets the FDT/DTM standard.

However, the analogous art PROFIBUS which addressed the same field of endeavor in system integration taught the software module meets the FDT/DTM standard (see [Page 27: 7.3 FDT/DTM Concept] “The FDT Interface: The FDT specification of FDT is contained in the PROFIBUS guideline 2.162, Device Description as Software Component: The specific functions and dialog of a field device for parameterization, configuration, diagnosis and maintenance, complete with user interface, are mapped in a software component. This component is called the DTM (Device Type Manager) and is integrated in the engineering tool or control system over the FDT interface”).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicants’ invention was made to modify the invention of Brownlie with the teaching of PROFIBUS for the use of FDT/DTM standard because the use of PROFIBUS could be able to provide Brownlie the ability to include FDT/DTM standard (PROFIBUS, page 27, fig. 31) in Brownlie’s application module (Brownlie, Fig. 1) so that system incorporates integration options where they are most useful, in the areas of engineering, diagnosis, service and asset management - liberated from the specific communication technologies of the various fieldbuses and the specific engineering environment of automation systems (PROFIBUS, page 27: User Benefits of FDT/DTM).

Regarding claim 3, Brownlie-PROFIBUS combination further taught the method as claimed in claim 1, further comprising the step of: providing an FDT frame application which runs in the control unit which serves as runtime environment for the software module (see [PROFIBUS, page 5: 2.4] “The PROFIBUS Tool Box: PROFIBUS has a modular design and offers a

range of communication technologies, numerous application and system profiles, as well as device management tools ”, see further fig. 7, 31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicants' invention was made to modify the invention of Brownlie with the teaching of PROFIBUS for the use of FDT frame application because the use of PROFIBUS could be able to provide Brownlie the ability to include FDT frame application (*PROFIBUS*, page 27, fig. 31) in Brownlie's application module (*Brownlie*, Fig. 1) so that system incorporates integration options where they are most useful, in the areas of engineering, diagnosis, service and asset management - liberated from the specific communication technologies of the various fieldbuses and the specific engineering environment of automation systems (*PROFIBUS*, page 27: *User Benefits of FDT/DTM*).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. “Field Device Integration” by Neumann et al., IEEE, 2001 is cited for the teaching of FDT/DTM concept defines the interfaces between device specific software components provided by the device supplier and the engineering tool of the control system manufacturer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can normally be reached on Monday-Friday (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi T. Arani can be reached on (571)272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L. R./
Examiner, Art Unit 2438
/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 2438